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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,827	10/29/2003	Kc Jin	BORL/0208.01	2826

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JOHN A. SMART
708 BLOSSOM HILL RD., #201
LOS GATOS, CA 95032

EXAMINER

ANYA, CHARLES E

ART UNIT	PAPER NUMBER
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2194

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/605,827

Applicant(s)

JIN, KE

Examiner

Charles E. Anya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/29/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 and 45 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/9, 10, 11/05.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-45 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-3,9-13,16,17,34-36,40,44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0046395 A1 to Fleming et al. in view of U.S. Pub. No. 2004/0193687 A1 to Christensen et al.**

4. As to claim 1, Fleming teaches a method for transmitting an event message from a first application to at least one second application over an event channel (figure 1), the method comprising: generating a message request based on an event at a first application (Supplier 104 page 4 paragraph 0062-0066), the message request having a header message and a body, the body containing typed event data marshaled for transmission over an event channel ("...Fixed header...Variable header...Filterable Body...Remaining Body..." page 5 paragraphs 0085-0088); sending the message request to the event channel ("...post..." page 4 paragraph 0066, "...pushed..." page 5 paragraph 0084); determining at least one second application to receive the event

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message (“...matches...” page 4 paragraph 0066); and delivering the event message to said at least one second application (“...delivers or makes available...” page 4 paragraph 0066, “...delivered to the subscriber...” page 4 paragraph 0073, “...forwarding...” page 5 paragraphs 0092/0098, page 6 paragraph 0103).

Fleming is silent with reference to reading the header to obtain information about the event without un-marshaling the body; creating a wrapper based, at least in part, on the information obtained from the header and appending the body to the wrapper to create an event message.

Christensen teaches reading the header to obtain information about the event without un-marshaling the body (Router 530 page 4 paragraph 0042); creating a wrapper based, at least in part, on the information obtained from the header and appending the body to the wrapper to create an event message (figure 5C “...wrapped...” page 4 paragraph 0042).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Fleming with the teaching of Christensen because the teaching of Christensen would improve the system of Fleming by providing a wrapping or encapsulating process that avoids buffering or materializing streamed message content (Christensen page 3 paragraph 0036).

5. As to claim 2, Fleming teaches the method of claim 1, further comprising: un-marshalling the second application for body of the event message at the processing the

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typed event data (“...converts...back...” page 5 paragraph 0097, page 6 paragraph 0107).

6. As to claim 3, Fleming teaches the method of claim 1, wherein said message request comprises a General Inter-ORB Protocol (GIOP) Message Request (“Event Types...” page 5 paragraphs 0083-0084).

7. As to claim 9, Christensen teaches the method of claim 1, wherein said appending step includes appending the body to the wrapper without un-marshaling the body (“...does not need to be materialized...” page 4 paragraph 0042).

8. As to claim 10, Christensen teaches the method of claim 1, wherein said appending step includes appending the body to the wrapper without re-marshaling the body (“...does not need to be materialized...” page 4 paragraph 0042)..

9. As to claim 11, Fleming teaches the method of claim 1, further comprising: retaining a copy of the body (“...stored...” page 4 paragraph 0068); un-marshaling at least a portion of the body for filtering purposes/applying a filter to the un-marshaled portion of the body for determining at least one second application to receive an event message based on the message request (“...filtered...” page 5 paragraphs 0084-0089, page 6 paragraph 0106); and appending the copy of the body to the wrapper to create

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an event message for delivery to said at least one second application (“...matches...” page 4 paragraph 0066, “...decides...” page 5 paragraph 0093).

10. As to claim 12, Fleming teaches the method of claim 1, further comprising: storing a copy of the body of the message request (“...stored...” page 4 paragraph 0068).

11. As to claim 13, Fleming teaches the method of claim 1, wherein said determining step includes determining at least one second application registered with the event channel to receive the event message (“...matches...” page 4 paragraph 0066, “...decides...” page 5 paragraph 0093).

12. As to claims 16,17 and 35, see the rejection of claim 1 above.

13. As to claim 34, see the rejection of claims 1 and 2 above.

14. As to claim 36, see the rejection of claim 2 above.

15. As to claim 40, see the rejection of claim 12 above.

16. As to claim 44, Fleming teaches the system of claim 34, wherein said event channel receives a reply message from the consumer object request broker and returns

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the reply message to the supplier program through the supplier object request broker (Writes 220B page 3 paragraph 0033).

17. As to claim 45, Fleming teaches the system of claim 34, wherein said supplier object request broker sends the message request to the event channel response to an event-pulling message sent by the consumer object request broker (Pull 110/Push 112 page 4 paragraph 0068).

18. Claims 4-6,37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0046395 A1 to Fleming et al. in view of U.S. Pub. No. 2004/0193687 A1 to Christensen et al. as applied to claim 1 above, and further in view of U.S. Pat. No. 6,981,265 B1 to Rees et al.

19. As to claim 4, Christensen and Fleming are silent with reference to the method of claim 3, wherein the header of said GIOP Message Request includes an operation name.

Rees teaches the method of claim 3, wherein the header of said GIOP Message Request includes an operation name ("...request message..." Col.18 Ln. 34 – 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Christensen and Fleming with the teaching of Rees because the teaching of Rees would improve the system of Christensen and Fleming by providing an object method to allow for object invocation.

20. As to claim 5, Rees teaches the method of claim 1, wherein said step of creating a wrapper includes reading the header to obtain an operation name ("...request message..." Col.18 Ln. 34 – 40).

21. As to claim 6, Rees teaches the method of claim 5, wherein said step of creating a wrapper includes inserting said operation name into the wrapper ("...request message..." Col.18 Ln. 34 – 40).

22. As to claims 37 and 38, see the rejection of claims 4 and 6 respectively.

23. Claims 7,8 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0046395 A1 to Fleming et al. in view of U.S. Pub. No. 2004/0193687 A1 to Christensen et al. as applied to claim 1 above, and further in view of U.S. Pub. No. 2001/0054065 A1 to Garg.

24. As to claim 7, Christensen and Fleming is silent with reference to the method of claim 1, wherein said step of creating a wrapper includes creating a wrapper for each said at least one second application registered with the event channel to receive the event message.

Garg teaches the method of claim 1, wherein said step of creating a wrapper includes creating a wrapper for each said at least one second application registered

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with the event channel to receive the event message ("...creates a wrapped...original address of the server" page 2 paragraph 0020).

It would have been obvious to one of ordinary skill in the art at the time the time the invention was made to modify the system of Christensen and Fleming with the teaching of Garg because the teaching of Garg would improve the system of Christensen and Fleming by allowing for delivery of requests to a server without overburdening the network (Garg page 1 paragraph 0011).

25. As to claim 8, Garg teaches the method of claim 7, wherein said step of creating a wrapper includes inserting an address of each said at least one second application into the wrapper ("...creates a wrapped...original address of the server" page 2 paragraph 0020).

26. As to claim 39, see the rejection of claim 8 above.

27. **Claims 14,15,18-20,25,26,28,32,33,41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0046395 A1 to Fleming et al. in view of U.S. Pub. No. 2004/0193687 A1 to Christensen et al. as applied to claim 1 above, and further in view of U.S. Pat. No. 6,961,939 B2 to Anderson et al.**

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28. As to claim 14, Fleming and Christensen are silent with reference to the method of claim 1, wherein said appending step further comprises: adjusting the wrapper length if necessary for proper alignment of the body.

Anderson teaches the method of claim 1, wherein said appending step further comprises: adjusting the wrapper length if necessary for proper alignment of the body (Col. 4 Ln. 1 – 7, figure 3 (Steps 316-322, Col. 6 Ln. 42 – 55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Christensen and Fleming with the teaching of Anderson because the teaching of Anderson would improve the system of Christensen and Fleming by providing an elegant means to determine the location of bytes in sub-messages with respect to the original message that has been fragmented, without requiring the size of the data fragments and header fragments to be constant (Anderson Col. 3 Ln. 34 – 38).

29. As to claim 15, Anderson teaches the method of claim 1, wherein said appending step further comprises: determining if the body appended to the wrapper is properly aligned (figure 3 (Step 316) Col. 6 Ln. 37 – 55); and if the body is determined to be misaligned, adjusting the wrapper length to provide for proper alignment of the body (Col. 4 Ln. 1 – 25, figure 3 Col. 6 Ln. 56 – 67).

30. As to claim 18, Fleming teaches a method for delivering a message based on an event at a supplier object to a consumer object through a communication channel

(figure 1), the method comprising: receiving at a communication channel a request from a supplier object based on an event, the request including a request header and a payload, the payload comprising typed event data based on the event marshaled for delivery through the communication channel (Supplier 104 page 4 paragraph 0062-0066, "...Fixed header...Variable header...Filterable Body...Remaining Body..." page 5 paragraphs 0085-0088); identifying a consumer object based on the request ("...matches..." page 4 paragraph 0066);

Christensen teaches to receive a message generating a message header based, at least in part, on the request header; creating a message for delivery to the consumer object by appending the payload to the message header, the message created without un-marshalling the payload ("...but can be wrapped..." page 4 paragraph 0042).

Anderson teaches determining if the payload of the message is properly aligned; and if the payload of the message is determined to be properly aligned, delivering the message to the consumer object (figure 3 (Steps 316-322) Col. 6 Ln. 55 – 67).

31. As to claim 19, Fleming teaches the method of claim the 18, wherein said request received from supplier object comprises a General Inter-ORB Protocol (GIOP) message ("Event Types..." page 5 paragraphs 0083-0084).

32. As to claim 20, Fleming teaches the method of claim wherein said request received from the 18, supplier object comprises a General Inter-ORB Protocol (GIOP) Message Request ("Event Types..." page 5 paragraphs 0083-0084).

33. As to claim 25, Fleming teaches the method of claim 18, further comprising: storing a copy of the payload to protect against loss of the payload ("...stored..." page 4 paragraph 0068).

34. As to claim 26, Anderson teaches the method of claim 18, further comprising: if said determining step determines that the payload is misaligned, adjusting the properly align the payload (figure 3 (Step 316) Col. 6 Ln. 37 – 55, Col. 4 Ln. 1 – 25, figure 3 Col. 6 Ln. 56 – 67).

35. As to claim 28, Anderson teaches the method of claim 18, further comprising: providing an indicator enabling a user to specify whether to adjust the message header if necessary to properly align the payload, and if said determining step determines that the payload is misaligned, adjusting the message length if said indicator specifies that the message header is to be adjusted (Col. 4 Ln. 1 – 7, figure 3 (Steps 316-322, Col. 6 Ln. 42 – 55).

36. As to claims 32 and 33, see the rejection of claim 18 above.

37. As to claims 41 and 42, see the rejection of claims 15 and 14 respectively.

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38. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0046395 A1 to Fleming et al. in view of U.S. Pub. No. 2004/0193687 A1 to Christensen et al. and further in view of U.S. Pat. No. 6,961,939 B2 to Anderson et al. as applied to claim 18 above, and further in view of U.S. Pat. No. 6,981,265 B1 to Rees et al.

39. As to claim 21, Anderson, Christensen and Fleming are silent with reference to the method of claim 20, wherein the request header of said GIOP Message Request includes an operation name.

Rees teaches the method of claim 20, wherein the request header of said GIOP Message Request includes an operation name ("...request message..." Col.18 Ln. 34 – 40).

It would have been obvious to one of ordinary skill in the art at the time the time the invention was made to modify the system of Christensen and Fleming with the teaching of Rees because the teaching of Rees would improve the system of Christensen and Fleming by providing an object method to allow for object invocation

40. As to claim 22, Rees teaches the method of claim 18, wherein said generating step includes extracting an operation name from the request header ("...request message..." Col.18 Ln. 34 – 40).

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41. As to claim 23, Rees teaches the method of claim 22, wherein said generating step includes inserting said operation name into the message header ("...request message..." Col.18 Ln. 34 – 40).

42. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0046395 A1 to Fleming et al. in view of U.S. Pub. No. 2004/0193687 A1 to Christensen et al. and further in view of U.S. Pat. No. 6,961,939 B2 to Anderson et al. as applied to claim 18 above, and further in view of U.S. Pub. No. 2001/0054065 A1 to Garg.

43. As to claim 24, Anderson, Christensen and Fleming are silent with reference to the method of claim 18, wherein said generating step includes inserting an address of the consumer object into the message header.

Garg teaches the method of claim 18, wherein said generating step includes inserting an address of the consumer object into the message header ("...creates a wrapped...original address of the server" page 2 paragraph 0020).

It would have been obvious to one of ordinary skill in the art at the time the time the invention was made to modify the system of Christensen and Fleming with the teaching of Garg because the teaching of Garg would improve the system of Christensen and Fleming by allowing for delivery of requests to a server without overburdening the network (Garg page 1 paragraph 0011).

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44. Claims 27 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0046395 A1 to Fleming et al. in view of U.S. Pub. No. 2004/0193687 A1 to Christensen et al. and further in view of U.S. Pat. No. 6,961,939 B2 to Anderson et al. as applied to claim 18 above, and further in view of U.S. Pub. No. 2002/0036986 A1 to Haarsten.

45. As to claim 27, Anderson, Christensen and Fleming are silent with reference to the method of claim 18, further comprising: if said determining step determines that the payload is misaligned, notifying the supplier object of an error condition.

Haarsten teaches the method of claim 18, further comprising: if said determining step determines that the payload is misaligned, notifying of an error condition (Step 807 page 7 paragraph 0070).

It would have been obvious to one of ordinary skill in the art at the time the time the invention was made to modify the system of Anderson, Christensen and Fleming with the teaching of Haarsten because the teaching of Haarsten would improve the system of Anderson, Christensen and Fleming by allowing error checking such that automatic retransmission would be initiated (Haarsten page 3 paragraph 0024).

46. As to claim 43, see the rejection of claim 27 above.

47. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 2003/0046395 A1 to Fleming et al. in view of U.S. Pub. No.

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2004/0193687 A1 to Christensen et al. and further in view of U.S. Pat. No.

6,961,939 B2 to Anderson et al. as applied to claim 18 above, and further in view of U.S. Pub. No. 2005/0114355 A1 to Nuttila.

48. As to claim 30, Anderson, Christensen and Fleming are silent with reference to the method of claim 18, wherein said determining step is based, at least in part, upon determining a General Inter-ORB Protocol (GIOP) version used by the consumer object.

Nuttila teaches the method of claim 18, wherein said determining step is based, at least in part, upon determining a General Inter-ORB Protocol (GIOP) version used by the consumer object ("...determine an appropriate version..." page 8 paragraphs 0168/0169).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Anderson, Christensen and Fleming with the teaching of Nuttila because the teaching of Nuttila would improve the system of Anderson, Christensen and Fleming by allowing for plural versions of data formats to be handled (Nuttila page 8 paragraph 0168).

49. As to claim 31, Nuttila teaches the method of claim 18, wherein said evaluating sub step is based, at least in part, upon determining a General Inter-ORB Protocol (GIOP) version used by the supplier object ("...determine an appropriate version..." page 8 paragraphs 0168/0169).

Allowable Subject Matter

50. Claim 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Anya whose telephone number is (571) 272-3757. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER